

Resolution on ALADIN-HIRLAM cooperation
Adopted by the ALADIN General Assembly on 30 October 2004

The ALADIN General Assembly, meeting in Split, Croatia, on 29-30 October 2004:

Considering the common goal of HIRLAM and ALADIN to develop, implement and maintain operational NWP systems at the meso-gamma scale, while maintaining state-of-the art meso-beta operational capabilities, based on their respective scientific, technical and managerial heritage;

Considering the proposal of the HIRLAM Council for cooperation with ALADIN, based on code collaboration and scientific exchange;

Noting that cooperation with HIRLAM should be consistent and compatible with the ALADIN high level objectives, strategy and short term plans, in particular the priority assigned to:

- the continuing development of a meso-beta model improving the current operational capabilities available to ALADIN partners, capitalising on the ALADIN scientific and technical heritage and new agreed concepts;
- its necessary and timely convergence with the parallel development of the AROME meso-gamma model, based on the ALADIN data assimilation and core dynamics, and the Meso-NH physics;

Stressing the importance of the “guidelines for relations among National Meteorological or Hydrometeorological Services regarding commercial activities” attached as Annex 2 to the WMO Resolution 40 (Cg XII), that aim at maintaining and strengthening in the public interest the cooperative and supportive relations among NMSs in the face of differing national approaches to the growth of commercial meteorological activities;

- 1- Welcomes the decision of the HIRLAM Council to explore full code cooperation with ALADIN and appreciates the relevance of the preparatory work performed by ALADIN and HIRLAM scientists;
- 2- Agrees that an efficient cooperation based on code collaboration, leading ultimately to a common library available for use by meso-beta and meso-gamma scale NWP models, would be beneficial to both HIRLAM and ALADIN, in particular, but not exclusively, in areas including the following:
 - Extended use of the ALADIN core dynamics;
 - Data assimilation techniques and assimilation of high resolution, remotely sensed observations from radars, satellites, etc.;
 - Limited area model ensemble prediction systems (LAMEPS);
 - Mesoscale-oriented physics;
 - Boundary conditions and coupling at high resolution;
 - Training.
- 3- Considers that operational complexity needs to be minimised and efficiency maintained through the adoption of a common code maintenance approach based on

best practices across the IFS/ARPEGE/ALADIN/HIRLAM chain, and taking into account the HIRLAM needs related to their near-real time Reference Control Run;

- 4- Agrees that efficient joint arrangements should be established without delay at science and project levels, aimed at defining consistent scientific strategies and short term work plans, including common elements to be agreed by HIRLAM and ALADIN;
- 5- Supports, and proposes to HIRLAM, the following approach:
 - The ALADIN Committee for Scientific and Strategic Issues (CSSI) and the HIRLAM Management Group (HMG), should establish, on behalf of the ALADIN and HIRLAM scientists and relevant bodies, a joint science plan addressing common issues, that would become part of the respective ALADIN and HIRLAM science plans;
 - The ALADIN Workshop and the HIRLAM All Staff Meeting should derive and propose a common annual work plan consistent with this joint science plan and with maintenance constraints, that would become part and parcel of their respective work plans;
 - The HIRLAM and ALADIN/AROME project management should approve this common work plan, taking into account committed resources and agreed priorities, and capitalising on the work of the respective advisory bodies.
 - This process should be consolidated by July 2005.
- 6- Agrees to further investigate the details of the cooperation, including political and legal aspects, in the context of the preparation of the next ALADIN and HIRLAM respective Memorandums of Understanding, with the objective of agreeing the articles permitting the "HIRLAM-ALADIN" cooperation.
- 7- Agrees in this regard that appropriate reference to the guidelines for relations among National Meteorological or Hydrometeorological and Meteorological Services (NMSs) regarding commercial activities, attached to the WMO Resolution 40 (Cg XII), should be included in the next ALADIN and HIRLAM MoUs.
- 8- Notwithstanding the above, concurs with the views of HIRLAM that, subject to appropriate cooperation agreements:
 - Both consortia would share ownership for commonly developed code;
 - Ownership of pre-existing codes would not be transferred;
 - All members of each Consortium would have rights to use shared software/common libraries for their operational and research activities;
 - All members of each Consortium would have rights to make available research versions of shared software to their national research communities, for exclusive research and education purposes.
- 9- Proposes that HIRLAM and ALADIN should have observer status at the ALADIN General Assembly and the HIRLAM Council, respectively, in order to facilitate communication and common understanding.